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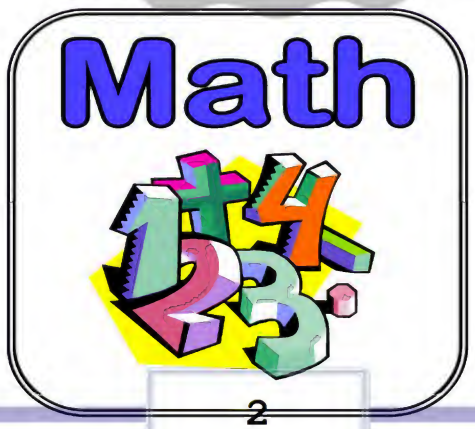
Math

Sheets for Home Work



Sheet 1

To	
Lesson	1
Unit	1

1 ***Complete each of the following :*** 5

[a] $0.7351 \simeq$ ..... (to the nearest hundredth)

[b] $152.3017 \simeq$ ..... (to the nearest thousandth)

[c] $\frac{2758}{1000} \simeq$ ..... (to the nearest hundredth)

[d] $3\frac{18}{500} \simeq$ ..... (to the nearest hundredth)

[e] $0.9998 \simeq$ ..... (to the nearest thousandth)

2 ***Choose the correct answer :*** 5

[a] $5.994 \simeq 5.99$ to the nearest .....

(unit ***or*** tenth ***or*** hundredth ***or*** thousandth)

[b] $12.3794 \simeq 12.38$ to the nearest .....

(unit ***or*** tenth ***or*** hundredth ***or*** thousandth)

[c] $4\frac{1}{8} \simeq$ ..... to the nearest hundredth.

(4.125 ***or*** 4.12 ***or*** 4.13 ***or*** 4.1)

[d] 3 725 m. $\simeq$ ..... to the nearest kilometre.

(3 ***or*** 4 ***or*** 37 ***or*** 3 730)

[e] 47 997 mL. $\simeq$ ..... to the nearest litre.

(47.9 ***or*** 47 ***or*** 48.99 ***or*** 48)

3 ***Complete each of the following :*** 5

[a] $14.372 + 15.449 =$ ..... $\simeq$ ..... (to the nearest hundredth)

[b] $17.48 - 9.3746 =$ ..... $\simeq$ ..... (to the nearest thousandth)

[c] $2\frac{3}{8} - \frac{4}{200} =$ ..... $\simeq$ ..... (to the nearest hundredth)

[d] The difference between $\frac{31}{500}$ and $0.421 =$ ..... $\simeq$ .....

(to the nearest hundredth)

[e] 13 259 gm. $\simeq$ ..... kg. (to the nearest kilogram)

4 Write the greatest decimal fraction which consists of 3 , 5 , 4 and 2 , then approximate it to the nearest hundredth and to the nearest thousandth. 2

5 Two pieces of cloth are of length 85.91 m. and 82.3972 m. Find the sum of the lengths of the two pieces approximating the result to the nearest thousandth. 3

Sheet 2

To	
Lesson	2
Unit	1

1 ***Put the suitable relation (>) , (<) or (=) :*** 6

[a] $\frac{7}{11}$ ☐ $\frac{5}{11}$

[b] $1\frac{9}{10}$ ☐ $2\frac{1}{10}$

[c] 1 ☐ $\frac{3}{5}$

[d] $\frac{3}{4}$ ☐ $\frac{5}{6}$

[e] 3.2 ☐ $3\frac{1}{2}$

[f] $\frac{61}{8}$ ☐ $7\frac{1}{2}$

2 [a] ***Arrange each of the following in an ascending order :*** 4

(1) $\frac{1}{2}$, $\frac{2}{5}$, $\frac{7}{10}$ and $\frac{1}{4}$

(2) 2.4 , $2\frac{1}{2}$, $3\frac{4}{5}$ and $1\frac{1}{2}$

[b] ***Arrange each of the following in a descending order :***

(1) $\frac{1}{2}$, $\frac{7}{8}$, 1 and $\frac{2}{5}$

(2) $\frac{1}{4}$, 0.8 , 0.4 , $\frac{1}{2}$ and $\frac{3}{4}$

3 ***Complete each of the following :*** 5

[a] $37.258 \simeq$ ..... (to the nearest hundredth)

[b] If $\frac{3}{8} = \frac{a}{24}$, then a = ...

[c] $42.7935 \simeq 42.794$ to the nearest .....

[d] If $\frac{16}{36} = \frac{4}{b}$, then b = ...

[e] $\frac{3}{500} \simeq$ ..... (to the nearest hundredth)

4 Find the values of x that satisfies the relation $\frac{3}{8} < \frac{x}{8} < \frac{9}{8}$ such that x is a whole number. 3

5 Write the smallest decimal fraction which consists of 3 , 9 , 2 and 4 , then approximate it to the nearest thousandth. 2

Sheet 3

To	
Lesson	3
Unit	1

1 ***Complete each of the following :*** 5

[a] $32.563 \times 100 =$ .....

[b] $25.0825 \simeq$ ..... (to the nearest thousandth)

[c] 7.003 kg. = ... gm.

[d] If $\frac{3}{7} = \frac{x}{21}$, then $x =$ .....

[e] $4\frac{5}{8} \simeq$ ..... (to the nearest hundredth)

2 ***Choose the correct answer :*** 5

[a] 4.162×100 ..... 41.62 (> *or* < *or* =)

[b] 32.531×10 ..... $0.32531 \times 1\,000$ (> *or* < *or* =)

[c] 572.4 cm. $\simeq$ ..... m. "to the nearest metre"

(6 *or* 50 *or* 60 *or* 572)

[d] $37.756 \simeq 37.76$ to the nearest .....

(tenth *or* hundredth *or* thousandth *or* unit)

[e] $7.04 \times$ ..... $= 704$ (10 *or* 100 *or* 1 000 *or* 10 000)

3 ***Put (✓) for the correct statement and (×) for the incorrect one :*** 5

[a] $5.47 \times 1\,000 = 547$ ( )

[b] If $\frac{3}{5} = \frac{a}{10}$, then $a = 6$ ( )

[c] $2.53 \times 100 = 25.3 \times 10$ ( )

[d] $3.7 < 3\frac{5}{8}$ ( )

[e] $2.5781 \simeq 2.58$ (to the nearest $\frac{1}{1000}$) ( )

4 If the price of a piece of sweet is 2.25 pounds. 2

What is the price of 10 pieces of the same kind ?

5 [a] ***Find the result of each of the following :*** 3

(1) $(37.21 + 3.4) \times 10 =$ .....

(2) $(7.742 \times 100) - 32.4 =$ .....

[b] ***Arrange the following numbers ascendingly :*** $4\frac{1}{4}$, 4.025 , 4.375 and $4\frac{1}{8}$

Sheet 4

To	
Lesson	4
Unit	1

1 ***Find the product of each of the following :*** 5

[a] $53 \times 0.7 =$ .....

[b] $24 \times 0.06 =$ .....

[c] $14 \times 0.003 =$ .....

[d] $5.4 \times 3.2 =$ .....

[e] $2.1 \times 0.34 =$ .....

2 ***Choose the correct answer :*** 5

[a] $2.3 \times 0.004 =$ ..... (92 *or* 0.92 *or* 0.0092 *or* 0.092)

[b] 136.592 ≃ 136.6 to the nearest .....

(ten *or* tenth *or* hundredth *or* unit)

[c] $\frac{3}{8}$ ..... 0.35 (> *or* < *or* =)

[d] 47.325×10 ..... 4.7325×100 (< *or* = *or* >)

[e] 426.305 ≃ ..... (to the nearest hundredth)

(400 *or* 426.30 *or* 426.31 *or* 426.305)

3 ***Complete each of the following :*** 5

[a] $35.61 \times 0.1 =$ .....

[b] $12.5 + 7.632 =$ ..... ≃ ..... (to the nearest $\frac{1}{100}$)

[c] $5.37 \times 5 =$ ..... ≃ ..... (to the nearest tenth)

[d] 7.3 m. = ... dm.

[e] $45.278 - 28.3451 =$ ..... ≃ ..... (to the nearest 3 decimal places)

4 Find the area of the rectangle , its dimensions are 2.4 cm. and 4.5 cm. approximating the result to the nearest unit. 3

5 If the price of one metre of cloth is 7.75 pounds , find the price of 2.25 metres of this cloth approximated to the nearest pound. 2

Sheet 5

To	
Lesson	5
Unit	1

1 ***Find the result of each of the following :*** 5

[a] $\frac{1}{2} \times \frac{4}{5}$ = ... [b] $16 \times \frac{5}{8}$ = ...

[c] $3\frac{2}{5} \times 4\frac{1}{2}$ = ... [d] 3.5×0.5 = ...

[e] 37.59×100 = ...

2 ***Choose the correct answer :*** 5

[a] 38.623 litres = ... mL.

(386.23 *or* 3 862.3 *or* 38 623 *or* 1 000)

[b] $\frac{3}{4} \times 1\frac{1}{2}$ = ... ($\frac{9}{8}$ *or* $\frac{1}{2}$ *or* $\frac{6}{10}$ *or* $\frac{5}{4}$)

[c] $1\frac{3}{7}$ ..... $1\frac{4}{7}$ (> *or* < *or* =)

[d] 93.4987 ≃ ..... to the nearest thousandth.

(93.40 *or* 93.50 *or* 93.499 *or* 93.5)

[e] If $\frac{6}{13} < \frac{x}{13} < \frac{8}{13}$, then x = ... (6 *or* 7 *or* 8 *or* 13)

3 ***Complete each of the following :*** 5

[a] $1\frac{1}{5} \times 2\frac{1}{3}$ = ... [b] 3.52 × 7.4 = ...

[c] 3.5 km. = ... m.

[d] $2\frac{3}{8}$ ≃ ..... (to the nearest 2 decimal places)

[e] $3\frac{1}{4} \times \frac{4}{13}$ = ...

4 [a] ***Arrange the following numbers in a descending order :*** 3

$\frac{1}{2}$, $\frac{7}{8}$, 1 and $\frac{2}{5}$

[b] ***Put (>) , (<) or (=) :***

(1) $2\frac{1}{4}$ ☐ $\frac{7}{3}$ (2) 5.73×100 ☐ 57 300

5 The price of a bar of chocolate is L.E. $2\frac{3}{4}$ 2

What is the cost of 15 bars of the same kind ?

Sheet 6

To	
Lesson	6
Unit	1

1 ***Find the quotient of each of the following :*** (5)

[a] $\frac{3}{4} \div \frac{3}{8} =$ .....

[b] $\frac{2}{5} \div \frac{7}{10} =$ .....

[c] $8 \div \frac{4}{9} =$ .....

[d] $1\frac{3}{4} \div \frac{1}{2} =$ .....

[e] $6\frac{1}{4} \div 12\frac{1}{2} =$ .....

2 ***Put (>) , (<) or (=) :*** (5)

[a] $\frac{3}{4}$ of an hour ☐ 40 minutes.

[b] $\frac{4}{5}$ ☐ $\frac{2}{3}$

[c] $7 \times \frac{1}{3}$ ☐ $2\frac{1}{3}$

[d] $2\frac{1}{2} \div 4$ ☐ $\frac{7}{8}$

[e] 3.2 kg. ☐ 3 200 gm.

3 ***Complete the following :*** (5)

[a] $7.35 + 16.028 \simeq$ ..... (to the nearest $\frac{1}{100}$)

[b] 2.56 m. = ... cm.

[c] $2.3 \times 1.1 =$ .....

[d] $\frac{2}{15} \times \frac{5}{6} =$ .....

[e] $\frac{2}{5} \div 3 =$ .....

4 The perimeter of a square is $\frac{8}{11}$ m. (3)

Find the length of each side of the square.

5 Ahmed bought a piece of cloth 4.2 metres long , if the price of one metre is 48.7 pounds. Calculate the price of the cloth approximating the result to the nearest pound. (2)

Sheet 7

To	
Lesson	7
Unit	1

1 ***Complete the following :*** 5

[a] 8.4 ÷ 10 = ...

[b] 3.6 ÷ 100 = ...

[c] 2456.8 ÷ 1 000 = ...

[d] 372.5 gm. = ... kg.

[e] 5 629 m. ≃ ..... km. (to the nearest km.)

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2 ***Choose the correct answer :*** 5

[a] 4.617 × ..... = 4 617 (10 *or* 100 *or* 1 000 *or* 0.1)

[b] $\frac{5}{9}$ ..... $\frac{7}{11}$ (> *or* < *or* =)

[c] 9.612 × 100 ..... 9 612 ÷ 100 (> *or* < *or* =)

[d] $\frac{2}{3} \times \frac{9}{8}$ = ... ($\frac{3}{4}$ *or* $\frac{4}{3}$ *or* 3 *or* $\frac{1}{4}$)

[e] $1\frac{1}{2} \div \frac{1}{4}$ = ... (2 *or* 6 *or* $\frac{3}{8}$ *or* 12)

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3 ***Arrange the following numbers ascendingly :*** 4

$\frac{11}{12}$, $\frac{5}{12}$, $\frac{3}{4}$, $\frac{2}{3}$ and $\frac{5}{6}$

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4 A road is of length 64 983 m. Find its length in kilometres approximating the result to the nearest hundredth. 3

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5 If L.E. 565.5 is distributed among 10 poor persons. 3

How much money did each one take ?

Sheet 8

To	
Lesson	8
Unit	1

1 ***Find the result :*** 3

[a] 3 968 ÷ 124 = ...

[b] 5 160 ÷ 215 = ...

[c] 19 968 ÷ 256 = ...

2 ***Choose the correct answer :*** 5

[a] 6 020 ÷ 215 = ... (34 *or* 32 *or* 28 *or* 26)

[b] 0.342 × 1.2 ..... 3.42 × 0.12 (< *or* = *or* >)

[c] $1\frac{3}{7}$ ..... $1\frac{5}{11}$ (< *or* = *or* >)

[d] $9\frac{1}{3} \times \frac{6}{7}$ = ... (8 *or* $\frac{1}{8}$ *or* $\frac{8}{21}$ *or* $2\frac{2}{3}$)

[e] 8 120 ÷ 145 = ... (58 *or* 56 *or* 54 *or* 52)

3 ***Complete the following :*** 5

[a] The number 14.669 ≃ ..... (to the nearest hundredth)

[b] 3.2 kg. = ... gm.

[c] 1 845 ÷ 123 = ...

[d] 0.97 × 0.05 = ...

[e] 75.351 ÷ 100 = ...

4 A truck can carry 162 boxes. Find the number of trips needed to transport 19 440 boxes. 3

5 [a] Ahmed bought 12 cans of juice , the price of each one is 1.85 pounds. How much money did Ahmed pay ? 4

[b] ***Arrange the following in an ascending order :***

0.6 , $\frac{5}{8}$, $\frac{2}{5}$ and 0.5

Sheet 9

To	
Lesson	9
Unit	1

1 ***Complete the following :*** 5

[a] 16.4 ÷ 0.4 = ...

[b] 73.92 ÷ 2.31 = ...

[c] 17.5 ÷ 1.25 = ...

[d] 74.632 × 100 = ...

[e] 56.431 + 2.115 = ... ≃ ..... (to the nearest hundredth)

2 ***Choose the correct answer :*** 5

[a] 8.46 dm. = ... cm. (846 *or* 0.846 *or* 84.6 *or* 8 460)

[b] 172 × 0.003 ..... 0.172 × 0.3 (< *or* = *or* >)

[c] $2\frac{1}{3}$ ..... $\frac{7}{3}$ (< *or* = *or* >)

[d] 18.2 ÷ 1.3 = ... (13 *or* 14 *or* 15 *or* 16)

[e] 54.5 ÷ 0.5 = ... (1.9 *or* 1.09 *or* 19 *or* 109)

3 The length of a roll of cloth is 53.55 metres. It was divided into equal parts where the length of each part is 3.15 metres. Find the number of these parts. 3

4 Find the number which if multiplied by 0.52 the result will be 1.248 3

5 Find the area of the rectangle whose length is 13.25 cm. and its width is 6.14 cm. , then approximate the result to the nearest hundredth. 4

Sheet 10

To	
Lesson	10
Unit	1

1 ***Find the result :*** 4

[a] $17 \div 6$ (approximated to the nearest tenth)

[b] $23 \div 7$ (approximated to the nearest $\frac{1}{100}$)

[c] $12.7 \div 3$ (approximated to the nearest hundredth)

[d] $12.34 \div 0.9$ (approximated to the nearest $\frac{1}{10}$)

2 ***Choose the correct answer :*** 5

[a] $\frac{1}{25} \times 50 \times 0.25 =$ ..... (4 *or* $\frac{1}{4}$ *or* $\frac{1}{2}$ *or* 2)

[b] $6.28 \div 0.4 =$ ..... (15.7 *or* 157 *or* 1.57 *or* 0.157)

[c] $2\frac{1}{4} \times 2\frac{2}{3} =$ ..... (6 *or* 3 *or* $\frac{2}{3}$ *or* $2\frac{1}{4}$)

[d] 7.4 ..... $7\frac{5}{8}$ (> *or* < *or* =)

[e] $7.8 \div 0.6 =$ ..... (10 *or* 11 *or* 13 *or* 14)

3 ***Complete the following :*** 5

[a] 39 days $\simeq$ ..... weeks. (to the nearest week)

[b] $\frac{2}{11} \simeq$ ..... (to the nearest tenth)

[c] $2\frac{1}{3} \div 1\frac{2}{7} =$ .....

[d] $25.2 \div 0.3 =$ .....

[e] $45.337 \times 10 =$ .....

4 ***Arrange the following ascendingly :*** 3

$3\frac{1}{2}$, $4\frac{1}{4}$, $3\frac{3}{4}$, $3\frac{1}{8}$ and $3\frac{2}{5}$

5 A family consumes 6.5 kg. of meat monthly where the cost of 1 kg. of meat is L.E. 38.5 Find what the family pays. (Approximate to the nearest pound) 3

Sheet 11

To	
Lesson	1
Unit	2

1 ***State which of the following is a set and which is not a set :*** 5

[a] The colours of the Egyptian flag.

[b] The letters in the word "Egypt".

[c] Beautiful cities in Egypt.

[d] Intelligent pupils in your class.

[e] Days of the week.

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2 ***Write the elements of the following sets :*** 5

[a] The set of digits of the number 74 581

[b] The set of letters of the word "student".

[c] The whole numbers between 5 and 10

[d] The even numbers less than 10

[e] The factors of 6

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3 ***Complete each of the following :*** 5

[a] $12\frac{1}{2} \times \frac{4}{5}$ = ...

[b] 45.334 × 100 = ...

[c] 25.25 ÷ 0.25 = ...

[d] 72.358 ≃ ..... (to the nearest hundredth)

[e] 7.2 × 5.2 = ...

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4 A building consists of 7 floors. If the height of each floor is 3.05 metres , find the height of the building. 2

---

5 ***Arrange the following in a descending order :*** 3

$\frac{1}{4}$, $\frac{4}{5}$, $\frac{1}{2}$, 0.4 and $\frac{3}{4}$

Sheet 12

To	
Lesson	2
Unit	2

1 ***Express each of the following sets by listing method :*** — 5

[a] A = the set of days of the week

[b] B = the set of digits of the number 32323

[c] C = the set of letters of the word "door"

[d] D = the set of prime numbers less than 10

[e] E = the set of even numbers between 7 and 17

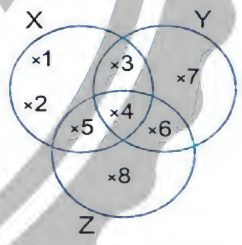
2 ***Express each of the following sets by description method :*** — 5

[a] A = {Port Said , Ismailia , Suez}

[b] B = {1 , 3 , 5} [c] C = {11 , 13 , 17}

[d] D = {9 , 10 , 11 , 12} [e] E = {o , a , g , l}

3 ***Using the Venn diagram below , list the element of each of the following :*** — 5



[a] X = ...

[b] Y = ...

[c] Z = ...

[d] The set of the elements found in X and Y = ...

[e] The set of the elements found in X , Y and Z = ...

4 ***Complete each of the following :*** — 3

[a] 43 days ≃ ..... weeks (to the nearest week)

[b] 2.576 m. = ... cm.

[c] If $\frac{1}{3} = \frac{a}{15}$, then a = ...

[d] 1.23 × 0.6 = ... ≃ ..... (to the nearest hundredth)

[e] $2\frac{1}{3} \div \frac{5}{6}$ = ...

5 If the price a piece of sweet is 4.35 pounds , what is the price of 35 pieces of the sweet ? — 2

Sheet 13

To	
Lesson	3
Unit	2

1 ***If A = {2 , 5 , 6 , 7} and B = {0 , 1 , 5 , 6} ,***
put the suitable sign of (∈ or ∉) : 5

[a] 6 ..... A , 6 ..... B

[b] 2 ..... A , 2 ..... B

[c] 1 ..... A , 1 ..... B

[d] 5 ..... A , 5 ..... B

[e] 65 ..... A , 65 ..... B

2 ***State if each set is finite , infinite or empty :*** 5

[a] The set of whole numbers lying between 3 and 4 (.....)

[b] The set of pupils in your school. (.....)

[c] The set of even numbers. (.....)

[d] The set of prime numbers between 1 and 3 (.....)

[e] The set of dinosaurs in the zoo. (.....)

3 ***Choose the correct answer :*** 4

[a] The smallest fraction in the following is .....

($\frac{1}{3}$ *or* $\frac{5}{8}$ *or* $\frac{2}{9}$ *or* $\frac{2}{5}$)

[b] $\frac{1}{2}$ ..... $\frac{1}{3}$

(> *or* = *or* <)

[c] The quotient of dividing 1.92 ÷ 0.6 = ...

(3.5 *or* 3.1 *or* 3.2 *or* 3)

[d] 28.9316 ≃ ..... (to the nearest thousandth)

(29 *or* 28.93 *or* 28.931 *or* 28.932)

4 ***Complete each of the following :*** 4

[a] If $3 \in \{2 , x , 5\}$, then x = ...

[b] If $5 \in \{3 , x + 4\}$, then x = ...

[c] If $8 \in \{7 , 5 , x - 1\}$, then x = ...

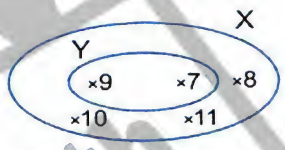
[d] $5\frac{5}{8}$ ≃ ..... (to the nearest two decimal places)

5 Find the perimeter of the rectangle whose length is 4.1 cm. and its width is 3.5 cm. , then calculate its area. 2

Sheet 14

To	
Lesson	4
Unit	2

1 ***Using the opposite Venn diagram , complete using ($\in$, $\notin$, $\subset$ or $\not\subset$) :*** 4



[a] Y X
[b] 8 X
[c] $\{10\}$ X
[d] 11 ..... Y
[e] $\varnothing$ X
[f] $\{9 , 11\}$ ..... Y
[g] Y ..... $\{10 , 11 , 9 , 7\}$
[h] X ..... Y

2 ***Write down all the subsets for each of the following sets :*** 4

[a] $\{5 , 7\}$
[b] $\{3 , 4 , 8\}$

3 ***Complete each of the following :*** 5

[a] If $\{5 , 3 , 1\} = \{x , 5 , 1\}$, then x = ...
[b] 3.25×1.6 = ...
[c] $9\frac{3}{4} \div 3\frac{1}{4}$ = ...
[d] If $\{7 , 10\} \subset \{2 , 10 , x\}$, then x = ...
[e] 70 hours $\simeq$ ..... days. (to the nearest day)

4 ***Choose the correct answer :*** 5

[a] $\{7\}$ ..... $\{17 , 77\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)
[b] 7 ..... the set of days of the week. ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)
[c] $\varnothing$ ..... $\{3 , 4 , 6\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)
[d] $135.42 \div 100$ = ...

(13 542 *or* 13.542 *or* 1.3542 *or* 1354.2)

[e] $\{1 , 2 , 3 , 4 , \cdots\}$ is ..... set.

(a finite *or* an infinite *or* an empty)

5 A worker earns L.E. $2\frac{1}{2}$ per hour. 2

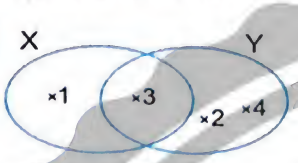
How many hours does he work to earn L.E. $8\frac{3}{4}$?

Sheet 15

To	
Lesson	5
Unit	2

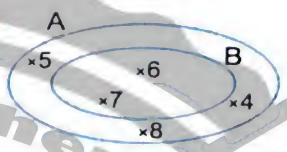
1 ***Complete the following :*** 4

[a]



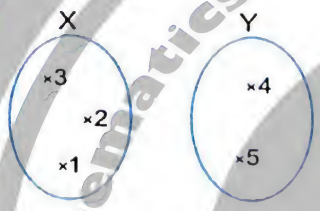
$X \cap Y =$ .....

[b]



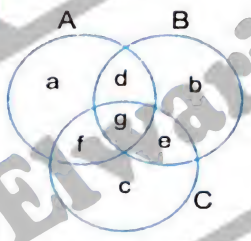
$A \cap B =$ .....

[c]



$X \cap Y =$ .....

[d]



$A \cap B \cap C =$ .....

2 ***Complete the following :*** 5

[a] $\{1 , 2\} \cap \{2 , 4\} =$ .....

[b] $\{1 , 3\} \cap \{5\} =$ .....

[c] $\{1 , 3\} \cap \varnothing =$ .....

[d] If $5 \in \{3 , x - 2\}$, then $x =$ .....

[e] $39\frac{2}{5} - 7.25 =$ ..... $\simeq$ ..... (to the nearest unit)

3 ***Choose the correct answer :*** 5

[a] $6.352 \times 100 =$ ..... (63.52 *or* 635.2 *or* 6 352 *or* 63 520)

[b] $0.03 \times 3.6 =$ ..... (0.108 *or* 1.08 *or* 10.8 *or* 0.0108)

[c] 2 ..... $\{11 , 22 , 33\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)

[d] 1 ..... $\{2 , 1 , 4\} \cap \{3 , 4 , 1\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)

[e] $\{a , b\}$ ..... $\{a , b , c\} \cap \{a , c , d\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)

4 ***Find the result of each of the following :*** 4

[a] $4\frac{1}{4} \div 8\frac{1}{2}$

[b] 6.217×100

[c] $11\,664 \div 216$

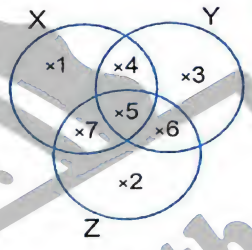
[d] $\frac{2}{11}$ approximated to the nearest tenth.

5 If L.E. 565.5 is distributed among some poor people and each of them took L.E. 6.5 Find the number of poor people. 2

Sheet 16

To	
Lesson	6
Unit	2

1 ***Using the opposite Venn diagram , complete :*** (4)



[a] X = ... [b] Y = ...

[c] Z = ... [d] X ∪ Y = ...

[e] X ∪ Z = ... [f] Z ∪ Y = ...

[g] X ∪ Y ∪ Z = ... [h] X ∩ Y ∩ Z = ...

2 ***Choose the correct answer :*** (5)

[a] {1 , 9} ..... the set of odd numbers. (∈ *or* ∉ *or* ⊂ *or* ⊄)

[b] 62.5 ÷ 2.5 = ... (25 *or* 35 *or* 700 *or* 45)

[c] 20.379 ≃ ..... (to the nearest hundredth)

(20 *or* 20.37 *or* 20.4 *or* 20.38)

[d] ∅ ..... {0} (= *or* ⊂ *or* ⊄ *or* ∈)

[e] If X ⊂ Y , then X ∩ Y = ... (X *or* Y *or* ∅ *or* {0})

3 ***Complete the following :*** (5)

[a] If 4 ∈ {6 , x , 9} , then x = ...

[b] If X = {3 , 4} , Y = {3 , 5} , then X ∪ Y = ...

[c] 3.56 km. = ... m.

[d] 0.45 × 0.6 = ...

[e] 753.81 ÷ 100 = ...

4 [a] Find the value of x if : $\frac{1}{4} = \frac{3}{x}$ (4)

[b] ***Arrange ascendingly :*** 0.8 , $\frac{3}{8}$, $\frac{3}{4}$ and 0.6

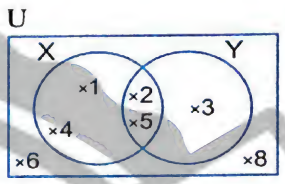
5 If the price of one kg. of apple is 9.75 pounds. (2)

Find the price of 2.5 kg.

Sheet 17

To	
Lesson	7
Unit	2

1 ***Using the opposite Venn diagram , complete :*** (5)



[a] U = ...

[b] $X \cap Y$ = ...

[c] $X \cup Y$ = ...

[d] $\grave{X}$ = ...

[e] $\grave{Y}$ = ...

2 If $A = \{1 , 2 , 3\}$, $B = \{2 , 3 , 5\}$, $U = \{1 , 2 , 3 , 4 , 5 , 6\}$, represent A , B and U by a Venn diagram , then find : (3)

[a] $\grave{A}$

[b] $\grave{B}$

[c] $A \cap B$

[d] $A \cup B$

3 ***Put the suitable sign of ($\in$, $\notin$, $\subset$ or $\not\subset$) :*** (4)

[a] 12 ..... $\{10 , 2\}$

[b] $\{7\}$ ..... the set of even numbers.

[c] 3 ..... $\{33\}$

[d] $\{2 , 5 , 9\}$ ..... the set of prime numbers.

4 ***Choose the correct answer :*** (4)

[a] $10.57 \div 9 \simeq$ ..... to the nearest hundredth.

(1.20 *or* 1.18 *or* 1.17 *or* 1.16)

[b] $2\frac{1}{4} \times 1\frac{2}{3}$ = ...

($4\frac{1}{4}$ *or* $3\frac{3}{4}$ *or* $3\frac{7}{12}$ *or* $2\frac{2}{12}$)

[c] Which set is not a subset of $\{g , h , f\}$?

($\{f\}$ *or* $\{f , g , h\}$ *or* $\{\ \}$ *or* $\{gh\}$)

[d] $\{3 , 2 , 5\} \cap \{32 , 5\}$ = ...

($\{3 , 2 , 5\}$ *or* $\{32 , 5\}$ *or* $\{5\}$ *or* $\{32\}$)

5 ***Find the result :*** (4)

[a] 937.52×10

[b] $355 \div 33$ (to the nearest thousandth)

[c] $7\frac{4}{5} \div 3\frac{1}{4}$

[d] $38.56 \div 100$

Sheet 18

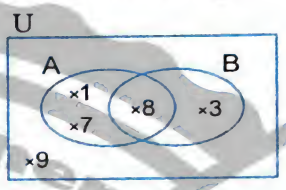
To	
Lesson	8
Unit	2

1 ***Using the opposite Venn diagram , list each of the following :*** (3)

[a] $A \cap B$ [b] $A \cup B$

[c] $A - B$ [d] $B - A$

[e] $\grave{A}$ [f] $\grave{B}$

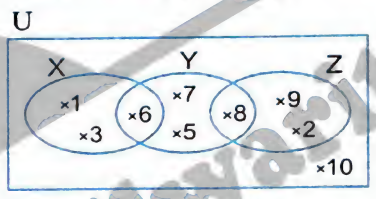


2 ***Using the opposite Venn diagram , find :*** (5)

[a] $X \cap Y$ [b] $Y \cup Z$

[c] $Z - Y$ [d] $\grave{X}$

[e] $X \cup Y \cup Z$



3 ***Complete the following :*** (5)

[a] $\{2 , 3\} \cup \{3 , 4\}$ = ...

[b] If $\{3 , 5\} \subset \{3 , 10 , x\}$, then x = ...

[c] $\{2 , 4 , 5\} - \{3 , 4 , 7\}$ = ...

[d] If $X \subset Y$, then $X - Y$ = ...

[e] $0.54 \times 1\,000$ = ...

4 ***Choose the correct answer :*** (5)

[a] $\varnothing$ ..... $\{3 , 5\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)

[b] If $\{4 , 7 , x\} = \{1 , 4 , 7\}$, then x = ...

(1 *or* 4 *or* 5 *or* 7)

[c] 45 days $\simeq$ ..... weeks (to the nearest week)

(5 *or* 6 *or* 7 *or* 8)

[d] The greatest number in the following is .....

(0.111 *or* 0.12 *or* 0.123 *or* 1.023)

[e] The number of subsets of the set $\{4 , 5\}$ = ...

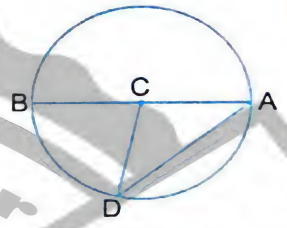
(2 *or* 3 *or* 4 *or* 5)

5 A big barrel has $131\frac{1}{4}$ litres of oil and we want to distribute the oil in bottles. The capacity of each is $5\frac{1}{4}$ litres. How many bottles are needed for that ? (2)

Sheet 19

To	
Lesson	1
Unit	3

1 ***In the opposite figure , complete :*** 4



[a] $\overline{AB}$ is a ..... in the circle.

[b] $\overline{AD}$ is a ..... in the circle.

[c] The point ..... is the centre of the circle.

[d] The line segments ..... , ... and ..... are radii in the circle.

[e] The triangle ACD is ..... triangle according to its side lengths.

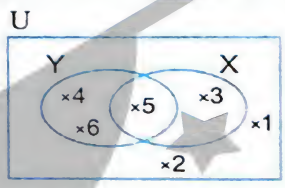
---

2 [a] Draw a circle of centre M and radius length 3 cm.

[b] Draw a circle N with diameter length 5 cm. 6

---

3 ***Use the opposite Venn diagram to list :*** 4



[a] $X \cap Y$

[b] $X \cup Y$

[c] $X - Y$

[d] $\grave{Y}$

---

4 ***Find the result :*** 3

[a] $2\frac{4}{5} \div 1\frac{3}{4}$

[b] 89 614 ÷ 518

[c] 69.5 × 0.47

---

5 Draw the circle of centre M with radius length 5 cm. , draw the diameter $\overline{AB}$, then draw the chord $\overline{BC}$ with length 6 cm. , then draw $\overline{AC}$ and find its length. 3

Sheet 20

To	
Lesson	2
Unit	3

1 ***Draw :*** 6

[a] The triangle ABC , in which AB = 7 cm. , BC = 5 cm. , AC = 6 cm.

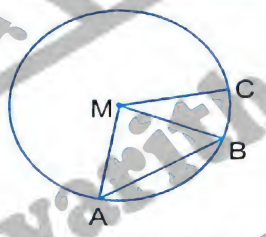
[b] The equilateral triangle XYZ whose side length is 5 cm.

[c] The triangle LMN in which LM = MN = 5 cm. and LN = 6 cm.

---

2 ***Choose the correct answer :*** 3

[a] ..... is a chord in the circle M



($\overline{MA}$ *or* $\overline{AB}$ *or* $\overline{MC}$ *or* $\overline{MB}$)

[b] 275.415 ÷ 100 = ...

(2754.15 *or* 27541.5 *or* 27.5415 *or* 2.75415)

[c] If U = $\{3, 4, 5, 10\}$ and A = $\{3, 4, 5\}$, then $\grave{A}$ = ...

(10 *or* $\{1, 0\}$ *or* $\{10\}$ *or* $\{3, 10\}$)

[d] A circle is of radius 3 cm. long , then its diameter length = ... cm.

(24 *or* 18 *or* 6 *or* 4)

[e] $\{2, 5, 8\} - \{3, 5, 7\}$ = ...

($\{2\}$ *or* $\{2, 8\}$ *or* $\{3, 7\}$ *or* $\{5\}$)

[f] 25.518 ÷ 6 ≃ ..... (to the nearest hundredth)

(4.253 *or* 4.3 *or* 4.25 *or* 4.26)

---

3 Draw the triangle XYZ , such that XY = 3 cm. , YZ = 4 cm. and XZ = 5 cm 3

What is the type of triangle XYZ according to the measures of its angles ?

---

4 ***Find the result :*** 3

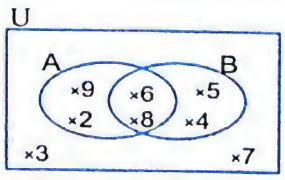
[a] 12.7 + 8.732 = ... ≃ ..... (to the nearest $\frac{1}{100}$)

[b] 3.7 × 0.35 = ...

[c] $4\frac{1}{8} \div 2\frac{1}{16}$ = ...

---

5 ***The opposite figure is a Venn diagram. List each of these sets :*** 5



[a] U **[b]** B ∩ A **[c]** A – B

[d] B ∪ A **[e]** $\grave{B}$

Sheet 21

To	
Lesson	3
Unit	3

1 Draw the triangle ABC in which AB = BC = 5 cm. and AC = 8 cm. , then draw the altitude from B to $\overline{AC}$ and measure its length. (3)

2 Draw the equilateral triangle ABC whose side length = 4 cm. , then draw $\overline{AD} \perp \overline{BC}$, find : (3)

[a] m (∠ CAD) [b] The length of $\overline{BD}$

[c] The perimeter of the triangle ABC

3 ***Choose the correct answer :*** (5)

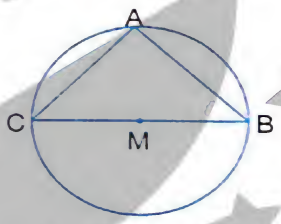
[a] If $5 \in \{2 , 3 , x\}$, then x = ... (20 *or* 3 *or* 4 *or* 5)

[b] 612.8 ÷ 100 ..... 6.128 × 10 (= *or* < *or* >)

[c] ∅ ..... {2 , 7} (∈ *or* ∉ *or* ⊂ *or* ⊄)

[d] ***In the opposite figure :***

The greatest chord in the circle M is .....



($\overline{AB}$ *or* $\overline{AC}$ *or* $\overline{MB}$ *or* $\overline{CB}$)

[e] {4 , 5 , 3} – {1 , 3 , 4} = ...

({5} *or* {1 , 3 , 4} *or* ∅ *or* {4})

4 ***Complete each of the following :*** (5)

[a] 3.25 × 10 = ...

[b] If $X \subset Y$, then $X \cup Y$ = ...

[c] 4.48 dm. ≃ ..... to the nearest cm.

[d] {2 , 5 , 7} ∩ {5 , 6} = ...

[e] The number of altitudes of the triangle = ...

5 ***Find the result :*** (4)

[a] $1\frac{1}{5} \times 1\frac{1}{3}$ [b] $2\frac{1}{5} \div 3.3$

[c] (24.6 + 1.24) × 3 [d] 22.5 ÷ 1.5

Sheet 22

To	
Lesson	1
Unit	4

1 ***The following table shows the result of a survey has been applied to know the views of 100 pupils about the favorite game to them :*** 5

The game	Football	Handball	Basketball
The number of views	50	40	10

[a] If one pupil is chosen at random , answer the following questions :

(1) What is the probability that one of them prefers football ?

(2) What is the probability that one of them prefers handball ?

(3) What is the probability that one of them prefers basketball ?

[b] If there are 300 pupils , what is the expected value of the number of pupils who prefer football ?

[c] If there are 1 000 pupils what is the expected value of the number of pupils who prefer basketball ?

2 ***Choose the correct answer :*** 4

[a] $2.5 \times 100 =$ ..... (250 *or* 25 *or* 0.25 *or* 0.025)

[b] $\{b\}$ ..... $\{b , c\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)

[c] Number of altitudes of any triangle is .....

(1 *or* 2 *or* 3 *or* 4)

[d] $3.752 \simeq 3.75$ to the nearest .....

($\frac{1}{10}$ *or* $\frac{1}{100}$ *or* $\frac{1}{1000}$ *or* $\frac{1}{10000}$)

3 ***Complete :*** 4

[a] If $U = \{1 , 2 , 4 , 6 , 8\}$ and $A = \{1 , 6\}$, then $\hat{A}$ = ...

[b] The longest chord in the circle is called .....

[c] The set of the digits of the number 30 772 is .....

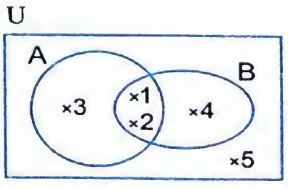
[d] The triangle whose measures of angles are 30° , 50° and 100° is called ..... -angled triangle.

4 ***Use the opposite Venn diagram to find :*** 5

[a] $A \cup B$ [b] $A \cap B$

[c] $A - B$ [d] $\hat{B}$

[e] $(A \cap B)\hat{}$



5 Draw the equilateral Δ ABC in which its side length is 3 cm. , then find its perimeter. 2

Sheet 23

To	
Lesson	2
Unit	4

1 A box contains 4 white balls , 3 blue balls and 5 red balls , all of them are of equal size. When one ball is drawn randomly from the box , find the probability of : 2

[a] blue ball. [b] red ball.

[c] not red ball. [d] red or blue ball.

2 ***Complete each of the following :*** 4

[a] The probability of the certain event is .....

[b] Any chord passing through the centre of the circle is called a .....

[c] 1.8×0.09 = ...

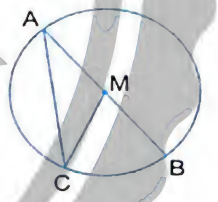
[d] $\{3 , 4 , 5 , 2\} - \{5 , 2\}$ = ...

[e] ***In the opposite figure :***

(1) $\overline{AB}$ ..... in the circle.

(2) The point ..... is the centre of the circle.

(3) MA = ... = ...



3 ***Choose the correct answer :*** 5

[a] $\{2\}$ ..... $\{1 , 22 , 33\}$ ($\in$ *or* $\notin$ *or* $\subset$ *or* $\not\subset$)

[b] $\frac{2}{5} <$ ..... ($\frac{2}{5}$ *or* $\frac{2}{3}$ *or* $\frac{2}{7}$ *or* $\frac{3}{8}$)

[c] As throwing a fair die once and observing the apearing number on the upper face , then the probability of appearing an even number is ..... ($\frac{1}{3}$ *or* $\frac{1}{2}$ *or* $\frac{5}{6}$ *or* $\frac{1}{6}$)

[d] $2\frac{1}{4} \times 1\frac{2}{3}$ = ... ($3\frac{3}{4}$ *or* $\frac{4}{15}$ *or* $\frac{1}{3}$ *or* $\frac{47}{12}$)

[e] The probability of the impossible event is ..... ($\frac{1}{2}$ *or* $\frac{3}{4}$ *or* 1 *or* 0)

4 [a] If $U = \{1, 2, 3, 4, 5\}$, $X = \{1, 2, 4\}$ and $Y = \{1, 4, 5\}$ 5

Represent them by Venn diagram, then find :

(1) $X \cup Y$ (2) $X \cap Y$

(3) $\acute{X}$ (4) $X - Y$

[b] A card has been randomly drawn out of 10 cards numbered from 1 to 10

Find the probability of getting :

(1) an odd number. (2) a prime number.

(3) a number less than 5

---

5 [a] If 9 483 cans are packed in 29 boxes, then how many cans are in each box ? 4

[b] Draw the triangle ABC in which AB = 6 cm. and BC = AC = 5 cm., then draw the altitude $\overline{CD}$ on $\overline{AB}$ and find its length.